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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,762	03/05/2002	Marko Kesti	513-5	6862

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EXAMINER	
DESHPANDE, KALYAN K	
ART UNIT	**PAPER NUMBER**
3623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/091,762	KESTI, MARKO	
	Examiner	Art Unit	
	Kalyan K. Deshpande	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. The following is a final office action in response to the application filed October 6, 2006. Claims 11-30 are pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on April 24, 2001. It is noted, however, that applicant has not filed a certified copy of the 20010838 application as required by 35 U.S.C. 119(b). Applicant is reminded to file this certified copy in order to maintain a priority date of April 24, 2001.

Response to Amendments

3. Applicants' cancellation of claims 1-10 is acknowledged. Applicants' submission of new claims 11-30 is acknowledged.

Response to Arguments

4. Applicants' arguments filed on October 6, 2006 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 21 recite a method and a system for controlling and optimizing a process, however, the result of the body of the claims do not recite a method for controlling or optimizing a process. It is unclear how the body of the claims accomplishes the method and system recited. Furthermore, Examiner notes that the present invention is directed to the control and optimization of a business process, more specifically, the present invention discloses the optimization of a process using the work ability of personnel and correlating this factor to the probability of success of the work team as per the disclosed specifications of the present invention. Examiner notes that the recited limitations of the present invention do not accomplish this set forth method or system. Claims 12-20 and 22-30 recite the same subject matter rejected in claims 11 and 21, and therefore are rejected for the same reasons discussed above.

Claims 15 and 25 recite "determining a radius", however, it is unclear from the body of the claim exactly how the radius is determined. The body of the claim suggests that multiplying a pre-determined maximum value with a first type of information will yield a radius, though it is unclear how this will yield a radius.

Claims 16 and 26 recite forming a line that represents a relationship between the pre-determined maximum value and the first type of information. It is unclear what relationship forming this line segment will represent and how this line segment is different from the radius. Furthermore, claims 16 and 26 recite calculating an angle value based on the second information type. It is unclear how an angle is formed based on a single value.

Claims 17 and 27 recite "calculating the probability value" summing the line segments and dividing the sum by the radius. It is unclear how the line segments are summed and are divided by a radius. Furthermore, it is unclear how these computations will result in a probability value.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)*). In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson, 409 U.S. at 71-72, 175 USPQ at 676-77*). Additionally, a claim may not preempt abstract ideas, laws of nature or natural phenomena nor may a claim preempt every "substantial practical application" of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions themselves (*Gottschalk v. Benson, 409 U.S. 63, 71-72 (1972)*). (Please refer to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" for further explanation of the statutory requirement of 35 U.S.C. § 101.).

Claims 11 and 21 merely recite the manipulation of an abstract idea and fail to produce a useful result. Claims 11 and 21 recite a "method for controlling and optimizing a process", however, the body of the limitation and the steps set forth therein fail to produce a "method for controlling and optimizing a process". Because the body of the claim fails to accomplish the method set forth in the preamble, claims 11 and 21 fail to produce a useful result.

Furthermore, claims 11 and 21 merely recites the manipulation of an abstract idea and fails to produce a tangible result. Claims 11 and 21 result in "adjusting at least one of said inputs of said processes based on the probability value", which is a mere abstract idea that does not produce real-world results, therefore result of this step is not tangible. Because the results produced by these steps are not tangible, claims 11 and 20 are considered to be directed toward non-statutory subject matter.

Claims 12-20 and 22-30 recite subject matter already addressed by the 35 U.S.C. 101 tangibility rejections of claims 11 and 21; therefore the same rejection applies to these claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 11-14, 20, 21-24, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Locke (U.S. Patent Publication No. 20020099585).

As per claim 11, Locke teaches:

A method for controlling and optimizing a process having controllable variable inputs comprising:

(a) determining a value for each of at least a first type and a second type of information from said inputs based on pre-determined criteria (see paragraphs 16-24; where the value of the cost function is optimized based on managing all of the parameters that affect the cost function. All parameters that effect the cost function are input information. For example, the replenishment quantity and length of inventory cycle are input information.);

(b) generating a vector-based scale having a reference point based on characteristics of said at least first and second type of information, said scale providing for entry of at least one of said values resulting from step (a) based on a magnitude of said value from said reference point and correlating at least another of said values resulting from step (a) to a direction in relation to said reference point (see paragraphs 36-47; where control points are selected. Using the control points, the system determines the adjustment to the parameters in order to optimize the process (cost function). The values that result closest (having the shortest distance or magnitude) value from the control points is the optimal points.);

(c) calculating a probability value for obtaining an optimized result by mapping said value to said scale (see paragraphs 35-47 and figures 3-4; where a value

closest to the pre-determined control point is determined. This point is the optimal point.); and

(d) adjusting at least one of said inputs of said process based on the probability value (see paragraphs 35-47; where the parameters are adjusted to determine the optimize the cost function.).

As per claim 12, Locke teaches:

The method of claim 11, wherein determining said value comprises:

Collecting quantitative values from each of said first and second type of information (see paragraphs 16-24 and 35; where the value of the cost function is optimized based on managing all of the parameters that affect the cost function. All parameters that effect the cost function are input information. For example, the replenishment quantity and length of inventory cycle are input information.); and

averaging the quantitative values for each of said first and second type of information (see paragraphs 16-24 and 35; where the average of the parameters can be incorporated in optimizing the process. In the example provided, the SKU is averaged over time in dollars per day.).

As per claim 13, Locke teaches:

The method of claim 12, comprising determining said values continuously (see paragraph 36; where discontinuities can be eliminated.).

As per claim 14, Locke teaches:

The method of claim 11, wherein generating said vector based scale comprises forming an equidistant vector-based scale having substantially a 180 degree angle (see figures 3-4; where the vector based scale has a 180 degree angle.).

As per claim 20, Locke teaches:

The method of claim 11, wherein said probability value is balanced probability value describing said probability of a team obtaining said optimized result (see paragraph 51; where the system is applied to accelerate the probability of success for teams using the system.).

Claims 21-24 and 30 recite a system embodiment of the method recited in claims 11-14 and 20, which is taught by Locke (see paragraph 62). Claims 21-24 and 30 further recite limitations already addressed by the rejections of claims 11-14 and 20; therefore the same rejections apply to these claims.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 15-19 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke (U.S. Patent Publication No. 20020099585).

As per claim 15, Locke fails to explicitly teach "determining a radius length for said vector-based scale by multiplying a pre-determined maximum value associated with said first type of information by a number of said values". It is old and well-known

in the art to determine a radius by multiplying two values. The advantage of determining the radius is that it enables one to determine the optimal points for the business process. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to modify Locke to incorporate the feature "determining a radius length for said vector-based scale by multiplying a pre-determined maximum value associated with said first type of information by a number of said values" in order to best evaluate the optimal points for the business process, which is a goal of Locke (see paragraph 1-3).

As per claim 16, Locke teaches "forming a line segment having a length representing a relationship between said value and a predetermined maximum value based on said first type of information" (see paragraphs 36-47; where line segments are formed between data points and control points. Control points are chosen based on the desired accuracy of the optimization, which is the same as the maximum desired value.) and "positioning said line segment on said scale at an angle corresponding to said calculated angle value, first end of said line segment being situation at a zero point on said scale" (see paragraphs 36-47; where line segments are drawn on the vector scale based on the angle between the data points. Control points are generated at the ends of the segments, which is the same as the zero point.). Locke fails to explicitly teach "calculating an angle value based on said second type of information". It is old and well-known in the art to calculate an angle value based on data points. The advantage of calculating angles is that it enables a user to accurately and properly determine the necessary values in order to optimize the process. It would have been obvious, at the

time of the invention, to one of ordinary skill in the art to modify Locke to incorporate the feature of "calculating an angle value based on said second type of information" in order to enable a user to accurately and properly determine the necessary values to optimize the process, which is a goal of Locke (see paragraphs 1-3).

As per claim 17, Locke teaches "calculating the probability value comprises: summing vectorally a plurality of line segments mapped on said scale" (see paragraphs 15 and 25; where a plurality of values are mapped and summed. Line segments represent data values of the business process.). Locke fails to explicitly teach "dividing said vector sum by said radius length". It is old and well-known in the art to divide a sum of data values by a value that is the result of a data value multiplied by a fixed pre-determined constant. The advantage of this feature is that it enables a user to accurately and properly determine the necessary values in order to optimize the process. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to modify Locke to incorporate the feature of "dividing said vector sum by said radius length" in order to enable a user to accurately and properly determine the necessary values to optimize the process, which is a goal of Locke (see paragraphs 1-3).

As per claim 18, Locke teaches an apparatus, method, and a computer program to perform the optimization of a business process (see abstract). Locke further teaches determination of optimal values using a plurality of input values and graphic the input values and the result values (see paragraphs 16-24 and 35-47 and figures 3-4). Locke fails to explicitly teach "displaying said plurality of line segments and said probability

value in a graphical user interface". It is old and well-known in the art to display values, including line segments and probability values, after the determination of these values has been complete. The advantage of displaying the values is that it facilitates a users ability to select the appropriate values for use in actual production. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to modify Locke to incorporate the feature "display said plurality of line segments and said probability value in a graphical user interface" in order to facilitate a user's ability to select the appropriate values for use in actual production, which is a goal of Locke (see paragraphs 1-3).

As per claim 19, Locke teaches collecting a first and second type of information (see paragraphs 16-24 and 35; where the value of the cost function is optimized based on managing all of the parameters that affect the cost function. All parameters that effect the cost function are input information. For example, the replenishment quantity and length of inventory cycle are input information.). Locke does not expressly teach the specific data recited in claim 19; however, these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific data. Further, the structural elements remain the same regardless of the specific data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP ∋ 2106.*

Claims 25-29 recite a system embodiment of the method recited in claims 15-19, which is taught by Locke (see paragraph 62). Claims 25-29 further recite limitations already addressed by the rejections of claims 15-19; therefore the same rejections apply to these claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are pertinent to the current invention, though not relied upon:

Cloninger et al. (U.S. Patent No. 6865581) teaches a method of performing job analyses and delivering or providing access to the results of the job analyses by creating a list of job requirements and working conditions for each discrete task of a job, creating a physical demands analysis comprising a list of physical requirements of each discrete task of a job, and combining the lists into a job analysis database for determining whether a worker can perform a job.

Slater et al. (U.S. Patent No. 6526404) teaches a system is provided for use as a source of information and for providing to a user who makes a request for information, an answer to that request.

Donnelly et al. (U.S. Patent No. 6049776) teaches a Resource Management System (RMS) including an RMS server having an RMS database containing files storing information on employees, employee skills, employee schedules and projects.

Dewar (U.S. Patent Publication No. 20030191680) teaches a system and method for testing and/or evaluating employees or potential employees is disclosed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571) 272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kkd

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